

# IMPACT OF OCCUPATIONAL STRESS ON QUALITY WORK LIFE AMONG WIRE MAN OF TAMIL NADU ELECTRICAL BOARD

<sup>1</sup>**Kishor Kumar, Assistant Professor**

*kishor16sharma@gmail.com*

<sup>2</sup>**Roop Kamal, Assistant Professor**

*Roope7606@cumail.in*

**AIT-MBA, University School of Business,  
Chandigarh University, Mohali**

**Abstract** – The impact of the stress on the quality work life of any personality is the hot key in the modern trend of technological world. This study aims to understand the impact of the occupational stress on the quality work life of the Wire Man of Tamil Nadu Electric Board (TNEB). This study covers only 50 wire man employees of TNEB. The study was carried out by the structured questionnaire of Occupational Stress and Quality work life and evaluated using "Convenience Sampling Method" and by deploying the percentage, correlation and 't' Test tools, the data was analyzed. Indeed it has its own limitation in the form of accessing the employees, small quantum of respondents compared to huge wire man present in TNEB. The conclusion of the study is the occupational stress of wire man has got sufficient impact on the quality work life of the wire man. The stress factors of Role overload, Role Conflict, Strenuous working condition and responsibility has got its own impact on the quality work life of the wire man of TNEB, as they have not that much confident on stability, growth opportunities and satisfaction.

**Keywords** – Stress, Quality Work Life, Role Overload, Role Conflict, Strenuous Working Condition, Responsibility, Stability, Growth Opportunities, Satisfaction.

## I. INTRODUCTION

### **A. Occupational Stress**

One gradually attains tranquillity of mind by keeping the mind fully absorbed in the Self by means of a well-trained intellect, and thinking of nothing else. Thus the mind causes actual reaction for one's getting excited or aloof. If our mind is fully occupied and the work force starts coming even beyond the strength, then it becomes beyond the control of one's capacity. This is the exact place where the stress starts coming up. The new modern world everyday introduces new technologies and new forms. Even the learned when fails to update his knowledge needs fear to handle the newer situations. It is in this scenario, the psychological form of fear enter into the mind of the learned worker. This form of stress caused due to the factor that totally confine to his working area is named as occupational stress. The introduction

of newer technologies and getting job is narrowed down on that account and the environment forces one to “not to leave” the job where he finds unsuitable due to work life constraints is the real cause for the stress. The newer technologies instead creating easy atmosphere, indeed create fear phobia amongst workers that too with much experienced workers. This process of “deskilling” has created increased levels of boredom, making work less challenging and less satisfying for many workers. All these attitudes slowly convert into a slow poisoning disease which affects worker’s psychological issues and then later physiological issues. Among them the worst is the stress thus caused by the “Occupation”, known as “Occupational Stress”.

Occupational stress is a widespread construction where job related issues interact with the operator to either enhance or disrupt the physiological or psychological conditions. Researchers have examined occupational stress in a broad range of professional groups; for instance: pilots, nurses, accountants, teachers, university staff and managers. Organizational stress might be harmful for physiological and psychological effects on workers. Studies conducted hitherto, revealed that workers suffering from stress exhibit decreased productivity, absenteeism, higher number accidents, lower morale and greater interpersonal conflict with colleagues and superiors. The significance of the effects of occupational stress in some professions was reported, such as among nurses, managers and teachers. These studies indicated that stress could be related to factors like: Physical condition; Organizational culture; Interpersonal conflict; Personal characteristics and Job Nature.

Many of the researchers have conducted search on the occupational stress in the area of pilots, nurses, accountants, teachers, university staff and managers, IT professionals etc. But lack of consideration on investigating the occupational stress among Wire Man of TNEB is observed. There is little theoretical or empirical research carried out on the effects of occupational stress among Wire Man, a professional who is in charge of reception and distribution of electricity, ensuring safety running of electricity as well the lives of TNEB Customers. The main reason for researchers are not exploring the feasibility of stress undergone by the Tamil Nadu Electrical Board Department is that generally, it is not being considered while discussing about probable stressors. The harmful effects of occupational stress are known as the key problems for either employees or organization concerned. For employees, stress regularly contributes to the burnout, risk of accidents and illness like hyper tension, coronary heart disease and severe depression. This also leads to poor quality of performance, lower job satisfaction, high turnover and increased work absence or lack of concentration on the job.

### ***B. Quality of Work Life***

The concept of Quality Work Life (QWL) took roots with the behavioral approach to management which emerged as a result of Hawthorne experiments (1924-1933), conducted by El-ton Mayo and F.J. Roethlisberger. These experiments proved to be a milestone in changing the focus from productivity to people who are responsible for such productivity. These studies were primarily conducted to determine the effect of better physical facilities and material incentives on worker output. These studies showed that better physical activities or increased

economic benefits alone were not sufficient motivators in increasing productivity. In effect, the emphasis shifted to psycho-logical and social forces in addition to economic forces. May discovered that even workers are given special attention by management; the productivity is likely to in-crease irrespective of actual changes in the working conditions, even though working conditions should be such that they increase worker satisfaction.

In an organization, a high level of quality of work life is necessary to continue to attract and retain employees. So far, different researchers have presented diverse definitions of QWL. Quality of work life is mainly defined as “satisfying an employee’s needs via the resources, activities and outcomes that arise from involvement in the workplace”. Rethinam and Ismail [1] reviewed different researches about definitions and constructs of QWL and designated that quality of work life is a multi-dimensional construct and is made of a number of inter-related factors. Normala [2] proposes that the key constructs of QWL are higher payment, job security, better reward systems, growth opportunity and participative groups among others. Timossi et al [3] state that according to the Walton’s QWL model [4], the QWL is getting important as a way to save human and environmental values which have been ignored in favor of technological advancement of the economic growth and productivity. QWL has been found to influence the intention of quitting the job. More importantly, various studies on work life confirm that what happens in the workplace has considerable influence on individuals and their families. So it is vital to enhance the QWL in order to reduce the negative effects of lower QWL levels.

Generally any employed person spends nearly one third of their lives working for the elevation of the organization to which they belong. But for the Wire Man of TNEB in general and with respect to TNEB and its unit, they spend nearly half of their life towards working in an organizational goal setting, by means of their working and their traverse towards working environment. Thus their mental health, is often comes under severe threat. Two people exposed to the same threatening situation may differ substantially in the magnitude and duration of stress responses and stress related health problems might emerge in several contrasting ways both physically and mentally. These variations result from differences in temperament, social resources and the effectiveness of the coping responses that the individual brings to bear on the stressful transaction.

The purpose of this research is firstly, to uncover the level of QWL of the Wireman employees of TNEB, and secondly, to examine the impact of occupational stress on QWL. The findings of the current study may be used to propose potential management strategies to attenuate the negative effects of occupational stress on the QWL of Wireman in Tamil Nadu.

## II. REVIEW OF LITERATURE

The term “Quality of Work Life (QWL)” is reputed to have related to the well-being of employees. The term “Quality of Work Life” was first coined by Mills [5] he suggested that QWL had moved into the permanent vocabulary of both unions and management. From a business perspective, quality of work life (QWL) is important since there is evidence

demonstrating that the nature of the work environment is related to satisfaction of employees and work-related behaviors. QWL is also found to affect employees' work responses in terms of organizational identification, job satisfaction, job involvement, job effort, job performance, intention to quit, organizational turnover and personal alienation.

The term "techno – stress" was coined in 1984 by clinical psychologist Craig Brod [6], who described it as a modern disease caused by one's inability to cope or deal with information and communication technologies in a healthy manner. Stress in the workplace is recognized as contributing to a range of health and quality-of-life issues that could have far reaching consequences. The World Health Organization (WHO) argues that present work patterns have changed partly due to the increased use of information and communication technologies (WHO 2005) resulting in significant payback for organizations over the past four decades in terms of reduced operational costs, greater process efficiencies, new strategic alternatives, and possibilities for innovation.

At the same time, the exploring these effects on all categories were not done fully or not at all carried out. Major categories like employees at the level of Senior Supervisors or Managerial cadres in the domain of Information Technology or system information, excluded domains like military, government organization, government owned transport sectors like Railways, Airways etc because of their exclusive working, may lead to effect that has a dual nature.

Due to introduction of modern hitech information and communication technologies that are widely used by almost all senior supervisors and managerial cadres, can also cause negative reactions in individuals and require them to adjust in various ways along with the advancement of information technology and communication tools on managerial cadres, which holds good for any type of managerial cadres also. Many researchers in the past have argued that this increase was due to heavier workloads and it is most likely a combination of effects. Globalization and the fierce competitive nature of business has created lean organizations with cultures that reward people who work exceptionally hard, spend longer hours at work, and are connected to the organization 24/7 via information and communication. Further, information and communication technologies also changed the role of the individual in the organization. As an example, wherever automation are implemented for altering the organizational work on account of process reengineering, the task become more machine (Computer) mediation and thus reducing employee's physical and mental work but duly increasing the volume of data to be processed and also multifunctional activities– Zuboff [7]. Finally, information and communication technologies implementation often creates new structures of power, authority, and decision making, as processes are reengineered, old functions are eliminated, and new ones are created. As these examples show, organizational effects of information and communication technologies triggered changes are manifest in two ways – Joshi [8]. First, there is a direct effect, as is visible in information and communication technologies induced changes in the —technical system – that is, changes in tasks and processes. Second, there is an indirect effect that is evident in changes in the – social system – that is, in roles, reward systems, and authority structures. Both of these effects can be significant sources of stress for individuals in the

organization and can have adverse effects on individual productivity and performance.

There are some studies related to Managerial level employees. “Relationship – substance – orientation”, “Futuristic and professional orientation”, “Self deterministic and systemic orientation” were some of the factors of quality of working life experiences that were focused on employees holding middle managerial position in various organizations according to Chandranshu Sinha [9]. Wyatt Thomas and Chat YueWah [10] examined the perception of Quality of Work Life with a sample size of 332 managerial executives. Results from Factor analysis suggest four dimensions, which are named Favorable Work environment, Personal growth and Autonomy, Nature of job and Stimulating opportunities and Co-workers. The overall findings support the conceptualizations of factors involved in perception of Quality of Work Life.

### III. MATERIALS AND METHODS

#### *A. Scope of the Study*

Very few researchers made research on Tamil Nadu Electrical Board on any subject. Out of Electrical Board’s numerous categories, Wireman category occupies the prime category on two counts. First being their responsibility of receiving and distributing the electricity and second, they are face of Tamil Nadu Electrical Board. The research is done on the impact of occupational stress that affects the quality work life of Wireman. The importance of this study is to formulate control measures to overcome occupational stress and thereby to lead quality work life.

#### *B. Objectives of the Study*

- To identify the level of occupational stress of the wireman.
- To find out the work life quality of the wireman.
- Identify the methodology to overcome the occupational stress and to lead quality work life.

#### *C. Research Design and Sample*

Respondents of the study were from the Wireman of TNEB in Kancheepuram District. The sampling method adopted for this study is “Convenience Sampling”. All the respondents completed 46 questions of Occupational Stress Index (Srivastava and Singh,1981) and 45 questions of Quality Work Life Scale (QWLS) by Santhosh Dhar, Upinder Dhar and Rishu Roy. A cross-sectional study design was applied and the respondents of the research filled-in these standard questionnaire using a five-point response scale (1: I strongly disagree; 5: I strongly agree). Respondents were informed that the questionnaires will be kept confidential.

#### ***D. Measures***

Data were gathered with the printout of these standard questionnaires for OSI and QWLS. The questionnaire of the research is based on (a) questions concerning the demographic characteristics such as age, gender, work experience and education; (b) an instrument developed by authors to measure occupational stress by Srivastav and Singh; (c) QWL questionnaire developed by Santhosh Dhar, Upinder Dhar and Rishu Roy.

Standard Questionnaire created by A. K. Srivastav and Singh was used and the twelve factors of the occupational stress were identified as Role Overload, Role Ambiguity, Role Conflict, Unreasonable Political Pressure, Responsibility, under participation, Powerless, Poor peer relation, Intrinsic Impoverishment, low status, strenuous working condition and Unprofitability. Standard questionnaire developed by Santhosh Dhar, Upinder Dhar and Rishu Roy was used and the ten factors of Quality Work Life Scale were identified as Stability of Tenure, Growth opportunities, Employee Satisfaction, Competent Employees, Value orientation, Innovative Practices, Work life Balance, Human Relations, Learning Orientation and Challenging Activities.

### **IV. DATA PROCESSING, FINDINGS, SUGGESTIONS AND CONCLUSION**

#### ***A. Analysis and Interpretations***

The collected data were analyzed using appropriate statistical techniques. The descriptive statistics such as mean and S.D. were computed. In order to study the functional dependencies to indicate the likelihood of causal relationships between the variables, inferential statistical techniques of t-test, product moment correlation, and step-wise regression analysis were computed.

The age factor reveals that 14.0 per cent of the respondents' ages were ranging between 31 years to 40 years; 32.0 per cent of respondents' ages were between 41 years to 50 years and 54.0 per cent of respondents' ages were above 50 years. So, majority of the respondents are above 50 years of age group. It is identified that 96 per cent of the study population were married. Regarding the pay and allowances of the respondents, nearly 54 percent of the respondents were drawing their salary including Grade Pay and Dearness allowances in the range between INR 15,000 to 20,000. 26 percent of the respondents were drawing salary between INR 12,000 to 15,000 and 20 percent of the respondents were drawing their salary between INR 8000 to 12,000. There were no respondents who drew salary either below INR 8,000. 42 percent of the respondents were having work experience of more than 25 years. 22 percent of the respondents were having experience between 21 years to 25 years. 16 percent of the respondents were having experiences between 16 years to 20 years. 8percent of the respondents were having less than 5 years of experience, whereas 6 percent of the study population were having work experience between 5 years to 10 years and 11 years to 15 years each. It may be noticed that majority 64 percent pertains to more work experience of more than 20 years. 56 percent of the respondents were diploma graduates and 44 percent were I.T.I.

Table 1: Descriptive Statistics (OSI)

Sl. No	Factors	Number	Mean	SD
1	Role Overload	50	23.32	3
2	Role Ambiguity	50	12.12	2.16
3	Role Conflict	50	15.66	3.02
4	Unreasonable Political Pressure	50	13.6	2.14
5	Responsibility	50	11.34	1.38
6	Under participation	50	12.58	2.74
7	Powerless	50	8.62	2.09
8	Poor peer relation	50	11.94	2
9	Intrinsic Impoverishment	50	12.34	2.4
10	Low status	50	8.3	1.92
11	Strenuous working condition	50	13.86	2.16
12	Unprofitability	50	7.08	1.4
	Total OSI	50	150.7 6	14.55

The table reveals that majority of the respondents say Role overload scores (23.32) followed by other OSI dimensions.

Table 2: Descriptive Statistics (QWL)

Sl. No	Factors	Number	Mean	SD
1	Stability of tenure	50	35	5.46
2	Growth Opportunities	50	24.66	4.12
3	Employee Satisfaction	50	16.56	2.89
4	Competent Employees	50	22.66	3.32
5	Value Orientation	50	13.42	2.52
6	Innovative Practices	50	9.90	1.95
7	Work Life Balance	50	9.04	2.19
8	Human Relations	50	2.88	0.92
9	Learning Orientation	50	3.80	1.40
10	Challenging Activities	50	3.80	0.61
11	Total QWL	50	144.72	21.20

The above table infers that stability and growth opportunities were two major factors that had impact on quality work life, followed with other factors.

Three variables viz Salary, Experience and Education have significantly contributed for predicting the occupational stress. The first variable Salary seems to be 5.212, Experience seems to be 7.846 and Education seems to be 4.328. The predictive value of these variables separately is 0.01. Three variables viz Age, Salary and Experience have significantly contributed for predicting the quality of work life. The first variable Age seems to be 4.842, Salary seems to be 6.149 and Experience seems to be 4.192. The predictive value of these variables separately is 0.01.

The study showing the correlation between the Study on occupational stress and quality of work life reveals that Occupational stress is positively and significantly related to Quality of work life (0.511). So, there is direct relationship between the employees' occupational stress and quality of work life.

The study showing the correlation between the Role overload and quality of work life, Role overload is positively and significantly related to Quality of work life (0.482). So, there is direct relationship between the employees' Role overload stress and quality of work life.

The study showing the correlation between the Role Conflict and quality of work life, Role Conflicts positively and significantly related to Quality of work life (0.342). So, there is direct relationship between the employees Role Conflict stress and quality of work life.

The correlation between the strenuous working condition and quality of work life, strenuous working condition is positively and significantly related to Quality of work life (0.309). So, there is direct relationship between the employees' strenuous working condition stress and quality of work life.

The correlation between the Responsibility and quality of work life, Responsibility is positively and significantly related to Quality of work life (0.324). So, there is direct relationship between the employees Responsibility stress and quality of work life.

### ***B. Findings***

From the above analysis, the data revealed that the occupational stress of wireman has got sufficient impact on the quality work life. The statement of Role Overload, Role Conflict, Strenuous working condition and responsibility has got its own impact on the quality work life of the wireman, as they have not that much confident on stability, growth opportunities and satisfaction.

### ***C. Suggestions***

Though TNEB are giving adequate training and trying to impart knowledge transfer of so many new modern techniques and systems, yet the reachability to the residual personalities is not to the required value. TNEB may intensify the training and knowledge transfer along with so schemes for their uplift their living environment, status, stability, along with other opportunities for their higher positions.



## V. CONCLUSION

From this analysis and interpretation it is observed that these methods namely Percentage, Descriptive analysis, Regression and Correlation analysis have greatly helped for the findings. With these analyses for the purpose of this study, only few hypotheses were made. There are yet innumerable combinations of hypothesis can be identified and study of all these may throw light on good findings of one important cadre in Tamil Nadu Electrical Board. The researcher feels, definitely this is not the conclusion for this chapter, but an introduction of throwing a new area for new researchers.

## REFERENCE

- G. Rethinam, and M. Ismail, "Constructs of quality of work life: A perspective of information and technology professionals", *European Journal of Social Sciences*, 7(1):P58-70, 2008.
- D. Normala, "Investigating the relationship between QWL and organizational commitment amongst employees in Malaysian firms", *International Journal of Business and Management*, 5(10): P75-82, 2010.
- Timossi, L., Pedroso, B., Francisco, A., Pilatti, L, "Evaluation of QWL: An Adaptation from the Walton's QWL Model", XIV International Conference On Industrial Engineering and Operations Management. Rio de Janeiro. Brazil, 2008.
- R. E. Walton, "Criteria for Quality of Working Life", In: *The Quality of Working Life*. Ed. LE Davis, AB Cherns, New York: The Free Press, pp.91-104, 1975.
- <http://rphrm.curtin.edu.au/2001/issue2/qwl.html>, Thomas A. Wyatt & Chay Yue Wah, "Perceptions of QWL: A study of Singaporean Employees Development", *Research and Practice in Human Resource Management*, Vol9(2), pp59-76, 2001.
- Brod, C, "Technostress: The human cost of the computer revolution". Reading, MA: Addison Wesley, 1984.
- Zuboff, S, "In the Age of the Smart Machine: The Future of Work and Power", New York: Basic Books, 1988.
- Joshi, K, "Role conflict and role ambiguity in information systems design", *OMEGA: The International Journal of Management Science*, Vol. 17(4), PP369-380, 1989.
- Chandranshu Sinha, "Psychological Factors of Technostress: Empirical Evidence from Indian Organizations", *IJRM-Vol15-Iss2-PP49-64*, 2012.
- Wyatt, T.A., &Wah, C.Y, "Perceptions of QWL - A study of Singaporean Employees Development", *Research and Practice in Human Resource Management*, Vol. 9(2), 59-76, 2001.